

QUA=RAE

Here is news of Radio Association of Erie

VOL. II No. 3

SERVING TRI-STATE AMATEURS FOR 25 YEARS

OCTOBER 1970

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HAMFEST OCTOBER 10--
FLEA MARKET 6:00-7:00
DINNER 8:00

QUA-RAE STAFF

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NEXT MEETING OCTOBER 1 and 15

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OUR SILVER ANNIVERSARY YEAR

RADIO ASSOCIATION OF ERIE
★ 25TH ANNIVERSARY ★

HAMFEST

HAMFEST

HAMFEST

HAMFEST

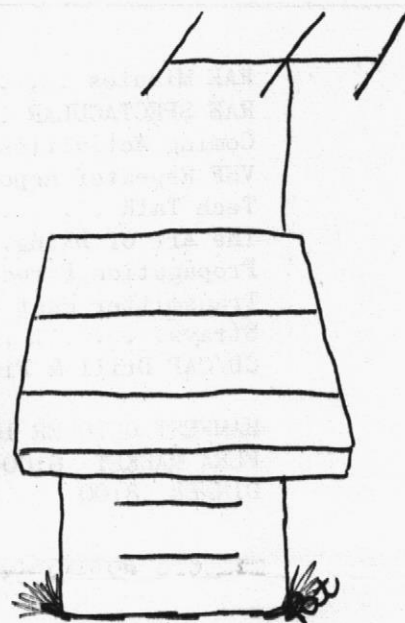
HAMFEST

HAMFEST

HAMFEST

HAMFEST

HAMFEST



OCTOBER 10, 1970

* PRIZES

* FEATURED SPEAKERS

* FLEA MARKET

* \$ 4.75 PER PERSON

SARA COYNE

(FORMERLY BEACHCOMBER)

ON THE PENINSULA

DINNER 8:00 P.M.

RAE MINUTES

September 3, 1970

Director WA3GIV opened the meeting at 8:30, in place of acting president K3VLP. Officers present: WA3KAI and WA3MAU. Directors present: WA3GIV, WA3HDK, and W3KPM. The minutes of the August 20 meeting were read and approved. The treasurers report indicated a balance of \$214.25. A copy of a letter written by WA3HSR to Jesse Bieberman, W3KT, third call area QSL manager was read to members.

WA3HSR reported that the mailing of August's QUA-RAE went well even with some printing problems. Mike also reported that the present mailing list of 183 would be increased to the 200 minimum for bulk mailing. W3KPM reminded everyone of the upcoming CD/CAP exercise on September 19 and 20, and indicated that all necessary arrangements had been made. K3VXE of the repeater committee reported that problems in the receiver were still being eliminated and that the receiving antenna was just about finished. No definite date of initial operation was given. WA3GIV reported that he had checked out the 2 meter FM rig donated to the club and found it in good shape. Fred also reported that xtals had been ordered. WA3JIS advised members that plans for the hamfest were moving along and would give more details later.

WA3HDK reminded everyone of the upcoming 20 th annual code and theory classes to be held at the downtown YMCA. K3VXE reported that flyers have been placed in all local electronic stores, sent to radio and TV stations and also sent to local schools. K3VXE also reported that postcards would be sent to all members notifying them of the upcoming elections. Mr. Carter of the United Insurance Co. indicated to WA3HDK that he would come to a club meeting and discuss various insurance coverages for the club.

WA3HSR advised members of this years WML contest which will be held from September 12 thru September 27. As usual, awards will be given at the HAMFEST. After much discussion on appointing an election committee, WA3GIV appointed WA3HSR and K3VXE along with the directors to handle this. A nominating petition for W3SN was turned in with the required number of signatures. Ron, K3VXE informed everyone of the demonstration and discussion of "Radio Control Airplanes" which would take place at the special election meeting on September 15. There were no bills turned in for disposition.

Fourteen (14) members were present at this meeting.

A motion was made for adjournment by W3KPM and seconded by WA3MKA. The meeting was adjourned at 9:20.

Respectfully submitted,
Chuck Manross, WA3KAI acting secretary

REMEMBER RAE HAMFEST OCTOBER 10 -- BIG SPECTACULAR ON NOVEMBER 19
KEEP READING

RAE ELECTION MEETING

The special election meeting of the RAE was held on Tuesday, September 15 at St. Georges Church on upper Peach St. In order for the election to take place, a quorum of 51% of the total membership had to attend. This meant at least 85 members were needed. Since only about 30 made it, the election of Board of Directors was postponed until the following Thursday at the regular meeting at the Red Cross Building. Those who did attend the meeting on Tuesday were treated to an interesting and informative discussion of radio controlled aircraft. The guest speaker was Wolfgang Budde WA3FFL. In his discussion which was climaxed by a short film and demonstration, Wolf told us how he designed both aircraft and boats for radio control. He was able to control the flaps, tail rudder and throttle with a single compact control unit. His fine workmanship and ability were evident in the construction of a miniature transmitter and receiver which was inspected by all. Most of the people attending were surprised at the great detail present in both the aircraft and boat displayed. Even though they were a masterpiece of complexity, they were made so that maintenance would be relatively simple. The film showed several flights of the airplane and some voyages by the boat. The highest altitude achieved by his aircraft was measured at 3200 feet. Wolf has spent many years of practice at flying and designing his aircraft and the RAE was pleased to have such a dedicated ham as a part of its program.

NOVEMBER 19 - - - RADIO ASSOCIATION OF ERIE SPECTACULAR

The RAE is proud to announce the acceptance of Jesse Bieberman, W3KT to speak at the November 19 activities meeting. W3KT is the newly elected vice-director of the Atlantic Division of the ARRL and for many years has been QSL manager for the third call district. At this meeting, Jesse will talk about the operation of his QSL service, a service many of us have taken advantage of, and enlighten us as to the problems encountered when receiving thousands of pieces of mail each year. This meeting should be a must for all area hams as they get a chance to meet "the man" who forwards all their DX cards. In attending, we can all gain a greater understanding as to what it takes to run such a service, and realize the deep dedication W3KT has towards amateur radio.

This meeting promises to be one of the most informative experiences ever offered to hams in Erie. The final location has not yet been decided upon, but area hams will be notified in plenty of time. We sincerely hope that all amateurs in the area will make an effort to attend and help make Jesse's trip to Erie a successful and memorable one. Remember: THURSDAY, NOVEMBER 19, 1970 - - - DON'T LET IT HAPPEN WITHOUT YOU.

LOCAL HAM HELPS IN EMERGENCY

While on his way to Corry to help in the CD/CAP drill on September 19, Jim Rose, WA3FFD came upon the scene of a disturbance along I-79 south of Erie. It seems that someone along side of the road had suffered an epileptic attack. Jim, on 2M FM contacted the CAP station at the airport and an ambulance was summoned to the scene. Thanks to quick action, another life is possibly saved by amateur radio. Nice going Jim.

	MON	TUES	WED	THUR	FRI	SAT
 S LEEN/ TRI-ST. NETS	E 27	? P <u>29</u> 28	? T <u>30</u> 30	O RAE C T 1	2	VK/ZL DX PHONE 3
LEEN/ TRI-STATE NETS	4	5	6	7	8	9
VK/ZL DX CW RSGB-28mc. TEST	11	12	13	14	15	16
NETS XMTR HUNT	18	19	20	21	22	23
LEEN-29.150 TRI-STATE-50.52 CQ-DX	25	26	27	28	29	30
						31

RAE ACTIVITIES

With the elections out of the way and a new slate of officers taking over, the RAE is planning bigger and better things for amateur radio this coming year. In October the BIG HAMFEST to be held on the 10th, will be highlighted by a travelogue presented by an exchange student. The discussion will include a slide show featuring her travels in the Netherlands. Also included in the program will be a brief talk commemorating the silver anniversary of the founding of the club. Speaking in behalf of the club will be one of the trustees. See the announcement page in this issue for further details of the affair. We hope to see a good turnout. Don't forget the SWAN CYGNET 270 transceiver to be awarded to some lucky ticketholder as well as other door prizes. Food, prizes and fun for all await you at the annual RAE HAMFEST on Saturday, October 10.

The QUA-RAE staff wishes to congratulate George Dickey, K3VLP and Bart Geer W3SN, on their recent election to the Board of Directors. Bart has served in this capacity for several years and his re-election is proof of a job well done. George has served the club in many capacities, the most recent being president this past year. We wish the best of luck to both of these men as they continue to serve the amateurs in the Erie area in their new posts.

VHF REPEATER COMMITTEE NEWS

The VHF Repeater Committee now has 17 members. The list of members follows this article. To date, the committee has purchased a transistorized GE Progress Line receiver which will be used as the repeater receiver. Each member has been assessed \$3 to cover the cost of the receiver and crystals. The collinear antenna has been built, less radials, and has been tested at W3ZLO's QTH with excellent results. There is a possibility that the City will allow the repeater antennas to be mounted on the police radio tower located near Chuck's house on Hilltop Road. With luck, a repeater should be operational within a few weeks. Each time one problem is solved, 10 more seem to crop up!

Other Repeater News:

VE3KSR, the Kitchner repeater, will soon begin to switch to 37 input when there is too much skip on 34.

The Jamestown repeater antenna fell over during a storm last month and still isn't up as of printing time. This explains why it hasn't been on the air lately.

A repeater conference was held in Grimbsy, Ont. Sept. 26th. A full report of the outcome will appear in next month's issue of the QUA-RAE.

***** MEMBERS OF THE VHF REPEATER COMMITTEE *****

W3ZLO	Chuck Smith	W3SN	Bart Geer
K3VXE	Ron Jakubowski	WA3HDK	Bob Bair
WA3FFD	Jim Rose	W3KPJ	Hank Snyder
W3DQF	Mason Freeman	K3VLP	George Dickey
WA3GSH	Barry Cappel	WA3MAU	Joe Mieczkowski
WA3GIV	Fred Tate	WA3JIS	Jim Smith
W3KPM	Tom Schwab	K3HFL	Bud Wilson
K3WOL	Bill Rothstein	K3QAY	Powell Brown
WA3BBV		Steve Brzezinski	

CD-CAP DRILL SUCCESSFUL

The Civil Defense-Civil Air Patrol test was a complete success communications-wise, according to Tom Schwab, W3KPM, CD Coordinator. For the first time, 2-meter FM was a prime communications link for Civil Defense. Station 1 was set up at Erie International Airport with Tom and Fred Seraka, K3EIU, manning the 75-meter and 2-meter rigs. Antennas were a low 75-meter dipole and a ground plane 25 feet up in the air. Jim Rose, WA3FFD, helped set up operations at the old terminal building, while waiting for a plane to take him and his 2-meter handi-talkie aeronautical mobile. However, the plane had engine trouble and never got off the ground, so Jim headed for Corry, mobile in his car.

The Com-Truck was set up at Corry Airport, with a 75 meter dipole and a 2-meter ground plane up about 30 feet. A 75 meter Hustler vertical was tried on the truck, but was unable to compete with the dipole on 75. Corry airport's elevation is 1740 feet, and communications were possible direct on 2 meters. However, Erie's

THE CARE AND FEEDING OF A REPEATER, Part Two

Last month we talked about the basic repeater operation. This month we'll look into a few of the problems encountered and how they are solved.

One of the biggest problems encountered besides just operating the repeater is keeping the RF from the transmitter out of the repeater receiver without desensitizing it. In the case of 34-94 operation, the two signals are separated by only 500 KHz., which isn't very much at these frequencies considering that it is possible to switch the transmitter crystal from 94 to 34 without retuning and still run the same power. Therefore this high-power transmitter signal must be attenuated at the receiver to prevent blanketing. The usual way this is done is through the use of very high-Q circuits such as cavities and strip-line filters. A cavity is a resonant enclosure, normally cubical or cylindrical, which can be tuned by changing the enclosure dimensions. A strip-line filter is a number of tuned circuits connected by resonant lengths of coaxial cable which, when properly matched can exhibit a very high Q. This problem, then, is usually solved with the minimum loss of receiver sensitivity.

Another problem encountered is the tripping of the repeater transmitter by skip and other stations not intending to use the repeater. One solution is known as "whistle-on." In this system, the repeater transmitter cannot be turned on until the repeater receiver receives a tone which opens up a reed relay. In a whistle-on system, this tone is usually around middle C, which can be whistled directly into the microphone by most amateurs. Otherwise, a simple tone oscillator can be used. If an even tighter restriction of the repeater operation is needed, single-tone and two-tone systems can be used. In a single-tone system, one discreet tone is used to turn on the transmitter, much like the whistle-on. In a two-tone system, the first tone unlocks the circuit to the second reed relay, and then the second tone operates the transmitter. Thus, without the proper tone sequence, the transmitter cannot be turned on.

Much more can be done with the use of tones besides operating the transmitter. In some more-advanced repeaters, touch-tone assemblies like those used in telephone service are used to pick up telephone lines and actually "dial" numbers and phone-patch the line into the repeater transmitter. Many police stations also have 2-meter FM receivers that are activated by a special tone (tone squelch) to receive emergency transmissions. As most areas of ham radio, this use of tones is limited only by the imaginations of the amateurs.

NEXT MONTH: Tying up the loose ends DE K3VXE, Ron

STRAYS

K3NAU Chuck Bliley was home for a week in September getting his shack back in shape and catching up on the local news. He has about 6 more months left in the Coast Guard.

VE3KSR The Kitchner repeater was down for a few days towards the end of last month. Probably were taking the time for maintenance and allowing the input frequency to be changed from 34 to 37 during heavy skip conditions.

THE ART OF DXing

When one becomes an amateur radio operator, he has available to him, many diverse areas of operation. He may want to specialize in traffic handling, or ragchew with friends in neighboring communities, but nearly all of us are aware of the lure of one of these diversities. That is working DX. That powerful unexplainable desire to work a station in a foreign country or distant place. Included in this desire is the responsibility of consideration, not only to the DX station, but to others trying to work the same station. The operator must display a high degree of skill and technique when working a DX station.

The best way to gain the respect of fellow operators is to follow your own good judgement and not the examples set by some stations. Unfortunately, however, this may not be the most certain way of working the station. It is probably advisable to listen to the pile-up for a while before diving in. Study the operating procedure of the DX station and conform to it. Listen also to some of the techniques used by your fellow hams. After listening for a while you become aware of the exchange between stations, and technique of calling. Sometimes stations give their call once, sometimes twice; do what the DX station recognizes. A DX station is usually out to work as many stations as possible and the way you operate can greatly affect this number. Try to be as clear and precise as possible. If he isn't telling you about his rig, don't tell him about yours. If he isn't commenting on his weather, don't comment on yours. If he isn't talking to you, don't call him while he's listening to someone else. Above all, use common courtesy on the band. If you don't work him on the first try, DON'T GIVE UP, hang in there and keep trying. Sooner or later, the big guns will work him and you will get through.

As you go along, you will learn many "how to get through" techniques such as, calling up or down 1 or 2 kc., tail-ending, and delayed calling but remember to keep courtesy first. The DX surely doesn't want someone QRMing the station he is talking to and in a long run, this may lengthen the time it takes you to work him. If the DX is calling a particular section of the country and you aren't in that section, don't answer him and say you just wanted a signal report but please QSL to . . . Techniques such as these don't help the Ws image throughout the world.

DXing is a lot of fun and despite what you may think, you can work DX by being considerate. With you setting the good example, others may follow, and the pile-ups may become more tolerable. QRZ QRZ QRZ the ZA ZA ZA calling. WA3HSR standing by.

ARRL OFFICIAL BULLETINS

BULLETIN NR 288 - - A footnote has been added by FCC to the allocations table for the amateur forty meter band. It reminds amateurs that the frequencies 7100-7300 kHz are assigned to the broadcasting service in ITU region one covering Europe Africa the Near East and USSR, and region three covering Oceania and the remainder of Asia. The basic principle governing regionally shared frequencies is equality of right to operate, as for instance avoidance of interference. The footnote also prohibits operation on 7100 to 7300 by amateurs in Baker, Canton, Enderbury, Guam, Howland, Jarvis,

OFFICIAL BULLETINS (cont)

NR 288

Palmyra, American Samoa and Wake Islands. Further information will appear in November QST. AR

BULLETIN NR 289 - - October QST will carry full details concerning the new ARRL 160 meter contest, to be held the second weekend in December. The initial format provides for all CW operation, with ARRL sections as the multiplier. Extra points will be given for DX contacts. A unique feature will be the reporting method. A copy of your log will not be required, unless specifically requested by ARRL. However, a special summary sheet and QSO record sheet must be submitted to constitute a valid entry. An addressed stamped envelope sent to ARRL, 225 Main St., Newington, Conn, 06111 will bring you the 160 meter contest package. This included the special summary, a newly designed Operating Aid 6 and a chart of top-band allocations. AR

PROPAGATION REPORT Condensed from CQ MAGAZINE

- 10 meters: Good openings are forecast throughout the daylight and early evening hours. Conditions for Europe should peak before noon, while skip to South America and Africa will peak in the early afternoon. Best conditions for Asia and the South Pacific are expected to be in the late afternoon and early evening.
- 15 meters: DX conditions on this band should run from shortly after sunrise thru the early evening hours. The peak of conditions is expected to be about an hour or two after the peak on 10 meters. It is, however, expected to stay open longer in the evening to areas in the Far East.
- 20 meters: This band can be expected to be in good shape to areas of the world nearly around-the-clock. Peaks of propagation should occur just before sunrise and during the late afternoon and early evening hours.
- 40 meters: DX openings towards Europe are expected to start in the late afternoon and gradually increase in the evening. Best conditions will exist during hours of darkness and peak at some time to all areas.
- 80 meters: Best conditions for DX on this band are expected to be during hours of darkness and during sunrise. Signals from the east and south will dominate the DX on this band.

Considering that the sunspot cycle is in its decline, this year should provide DXers with an ample amount of DX. Keep a close check on the lower bands, too as activity there will be increasing with the 5BDXCC award. You might be able to pick up a few of those rare ones that aren't too far away. On VHF, the TE scatter will still bring some openings between the US and parts of Central and South America. This condition is expected to peak in the early to middle evening hours. Keep alert of possible meteor showers for other openings on 6 meters. October should be a good month for all with the CQ World-Wide DX Contest on the 24-25 in the CW mode. Phone portion will follow in November. Good DX.

TRANSMITTER HUNT REPORT

The monthly 6 and 10 meter transmitter hunt was held on September 20. K3VLP on ten meters and K3QAY on six seem to have a pretty good scheme worked out. Last month's hidden site was on the east side of town and it seemed likely that this month's would be on the west; but this wasn't so. George and Brownie picked a site high and dry and where they could see everyone blundering around. WA3HSR figuring the west side couldn't even copy K3VLP who had some audio troubles. Mike searched around for about an hour but to no avail, as the only place he could copy was 7th and Myrtle. W3HLM was about the only one K3VLP could hear. Don circled and came in for a landing within one quarter mile from the site at Wintergreen Gorge. The winner of the affair was Ron, K3VXE. Ron, set on operating 2 M FM in the hunt threw his DX-150 into the car just in case. With his YL Kathy tuning, he discovered the site with little trouble. The six meter group had similar difficulties trying to locate the spurious signal source, but Myron, W3ALD succeeded in fine fashion and collected the point reward. Second was Rick, WA3ISN followed by Dave WA3EZN. The point totals as of September 1 (not including this hunt) are:

10 meters

W3BRB	61
WA3GIV	33
K3AFO	24
W3WDK	17
K3PLV	17
W3HLM	16
WA3HSR	12
K3VLP	11
WA3GJH	2

6 meters

W3ALD	67	W3JTF	2
K3QAY	44	W3UCZ	2
K3ATZ	27	WA3KJQ	2
WA3ISN	25	WA3GSH	1
WA3MKA	23	K3VLP	1
K3OSU	19		
WA3HRJ	14		
WA3DLS	9		
WA3EZN	6		

STRAYS

- WA3GMN Peg likes to work 15 meter SSB with her SWAN. She says she would like some company at the RAE meetings
- WA3GIV Fred finally got his plane ride in the airplane he installed a 2 M FM rig in. He was able to work many locals from his high QTH.
- K3AXB Dan is looking foreward to attending the RAE HAMFEST. Ask him sometime how he got his call on an Illinois plate.
- W3BVM Chuck has been doing a FB job as chief QUA-RAE photographer. Thanks for the help Chuck.
- WA3HJC Wayne has a 92% average in CTM school at Great Lakes, Ill. Keep up the good work Lee.
- W3DKL John has been trying to check in the LEEN on a regular basis. How about some of you other fellas.
- W3SN Bart Geer is taking over the trusteeship of the club license.

W8LAC Walt will be back on 10 this season looking for his many DX friends.

WA3JFV Jay is starting to get some of his neighbors into ham radio.

WA3FFL Wolf presented an interedting talk on radio controlled aricraft at the Sept. 15 RAE meeting. Thanks for a nice program Wolf.

WN3LKR Brad keeps saying he's going to get his general on Friday. Which Friday Brad?

WA3MAU Joe is trying to get his 41-V in working order. 2 meter FM is taking hold of everyone.

W3KPM Hats off to Tom and his crew for a FB job in the CD/CAP drill.

WA3KFX Doug will be NCS on LEEN during October. K3TUP did a FB job this past month.

WA3KKT Norma was made assistant EC for the Corry area recently.

K3HFL Thanks goes to Bud for selling the RAE his 2 meter receiver. It should make a fine receiver for the repeater.

K3VLP George enters the hospital for surgery on Sept. 29. We wish him a speedy recovery.

WA3HRH Doug has his phone patch set up now and will run patches for DX stations.

K3KJN Whatever became of Tom? Maybe we'll see him at the HAMFEST

W3IAS Wilbur is a pilot from the Corry area and gave WA3GIV a ride during the CD/CAP drill.

SSB

Peg WA3GMN is looking for buyers for a 15 meter beam. Those interested call at 864-6335 after 6.

FLASH

NEW OFFICERS FOR THE RAE YEAR OF 1971:

PRESIDENT John Squires, K3UPC
 VICE-PRES Ron Jakubowski, K3VXE
 SECRETARY Chuck Manross, WA3KAI
 TREASURER Joe M., WA3MAU

GOOD LUCK TO THESE FINE HAMS IN THE COMING YEAR

CD-CAP, cont.

antenna would have to have been higher to permit reliable communications and compete with VE3KSR. Manning the Com-Truck were Fred Tate, WA3GIV; his son Craig; Mike Hall, WA3HSR; and Rick Cutter, WA3MKT. Ron, K3VXE had his 2-meter mobile parked at CAP headquarters in downtown Corry and relayed communications to and from the Com-Truck.

Jim, WA3FFD, ran into a real emergency on his way down to Corry. On I-79, south of I-90, he came up upon what appeared to be an accident. Jim saw that an ambulance was needed and radioed to Tom at the airport to call one of the volunteer companies for one. Jim found upon further investigation that it wasn't an accident, but a person suffering from an epileptic seizure.

At one point on his way down to Corry, Jim could talk with both Erie and Corry. Once in Corry, he stopped at the CAP headquarters and picked up lunch to bring to a hungry crew at the Com-Truck.

All messages from Erie to Corry and back were handled with no difficulty over 75 meters SSB. Communications were secured at 2:45 PM.

THE FINAL FINAL

Two-meter FM has taken the area by storm. At no other time has mobile communications been so inexpensive and easy to install. Hopefully, more equipment will be available in the future to meet the demands of other amateurs. However, I feel that I have dwelt upon 2-FM enough for one issue. The CD-CAP test was a proving ground for this type of transmission, and, given the proper geography, it can be very successful. However, we've proven many times that point-to-point communications can be set up with the Amateur service. It has now come time for this communications to be utilized. The CD-CAP test was a dismal failure in this respect. In $4\frac{1}{2}$ hours, 3 official messages were sent between Corry and Erie. When communications was secured at 2:45 PM, the people at CAP headquarters in Corry were left more confused than when the test started at 10 AM, because they received no orders or instructions. Even though we know that this was no fault of CD communications, the CAP people who we were to handle traffic for might not realize this.

Amateur Radio CD communications has come of age now and is ready for action. This means that in a test of this nature more emphasis should be placed on message handling. Tests of mobility would also be useful so different locations could be found to simulate an actual necessary movement. Contingency plans should be worked out in these tests so as to give the participants practice for real emergencies, even if they be of a local nature. The time has come for Amateur Radio to take its place in local emergency communications and show the 5 watt 11-meter gang what tested amateur radio operators can accomplish.

73, DE K3VXE SK ..

— FLASH FLASH —

THURSDAY NITE, SEPT 24, WA3GIV, FRED WENT AERONAUTICAL MOBILE WITH THE PLANE THAT COULDN'T BE STARTED FOR CD-CAP. 300 FT. ABOVE GROUND OVER FAIRVIEW, HE COULD WORK W3KPM, K3VXE, & W3ZLO FULL QUIETING WITH 6 WATTS. WHAT NEXT??